

## DC/DC CONVERTER

### BACKGROUND OF THE INVENTION

#### 1. Field of the Invention

**[0001]** The present invention relates to a DC/DC converter for converting an inputted power supply voltage into a predetermined DC voltage, and more particularly, to a current-mode DC/DC converter.

#### 2. Description of the Related Art

**[0002]** DC/DC converters include DC/DC converter types which include a switching element located between a power input terminal and a terminal for outputting a predetermined DC voltage, connected to a load, wherein a predetermined DC voltage is maintained through opening and closing of the switching element. Such DC/DC converters are widely used because of their small size and the high efficiency that they provide. There exists an approach for controlling the opening and closing of the switching element, involving detecting and feeding back the current flowing in a coil connected to the switching element (for instance, Japanese Patent Application Laid-open No. H11-75367, Japanese Patent Application Laid-open No. 2003-319643, and Japanese Patent Application No. 2003-111242 which corresponds to Japanese Patent Application Laid Open No. 2004-320892). A converter